

EXECUTIVE SUMMARY

Mine Name: CATO Placer Sand #1 I.D. No. ACT/019/017
Operator: Crater Exploration, Inc. County: Grand
954 East 7145 South, Suite 202 New/Existing: New
Midvale, Utah 84047 Mineral Ownership: Fed. Land Bk./State
Telephone: (801) 255-3183 Surface Ownership: Private
Contact Person: Wilford Ruf Lease No.(s): U-39855 (state)
Life of Mine: 20 years Permit Term: 1 yr (concurrently w/bond)
Legal Description: Section 8, Township 23 South, Range 24 East
Mineral(s) to be Mined: Gold & other precious metals
Mining Methods: Placer; mass and size classification
Acres to be Disturbed: 50 total (no more than 10/yr)
Present Land Use: Agriculture, native habitat
Postmining Land Use: Agriculture
Variances from Reclamation Standards (Rule M-10) Granted: None

Soils and Geology:

Soil Description: Fine silt, sand and clay deposited by the action of the Colorado River over an old gravel bar.
pH: 7-8
Special Handling Problems: None Known
Geology Description: As above.

Hydrology:

Ground Water Description: None Known
Surface Water Description: Ephemeral channels direct runoff to the Colorado River.
Water Monitoring Plan: None; no water will be discharged into the Colorado River.

Ecology:

Vegetation Type(s); Dominant Species: riparian; tamarisk willow; upland native; big cottonwood; greasewood; rabbitbrush; agricultural; alfalfa.

Percent Surrounding Vegetative Cover: Alfalfa yield - 6 to 7 tons/acre

Wildlife Concerns: None

Surface Facilities: None permanent; temporary fuel tank, semi-trailers, front-end loader, large backhoe. One power pole on-site.

Mining and Reclamation Plan Summary: See Attachment

Surety:

Amount: \$9,680.00 (see attached estimate)

Form: Insurance Bond Irrevocable Letter of Credit

Renewable Term: One Year

First Interstate Bank, S.L.C.

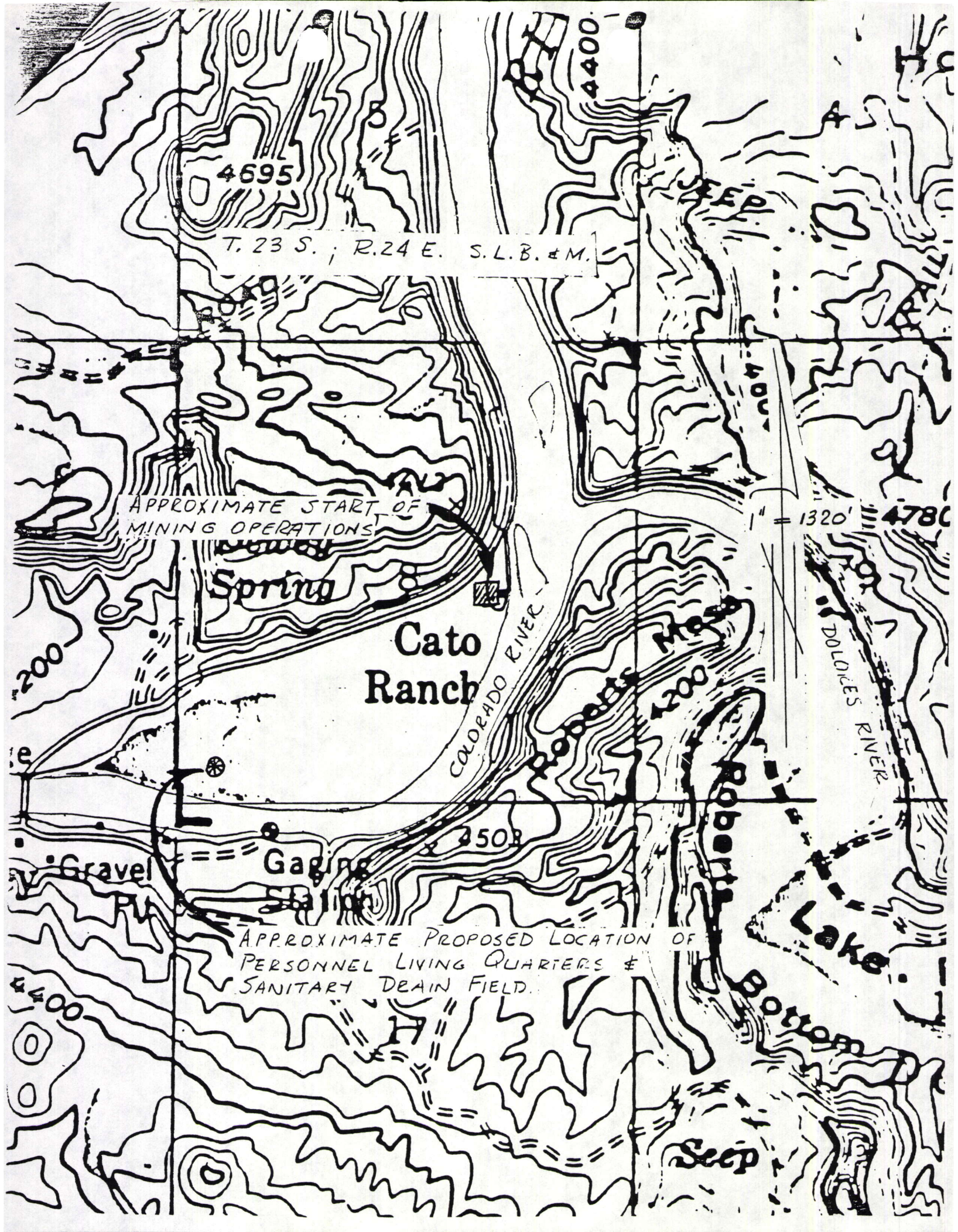
MINING AND RECLAMATION PLAN SUMMARY

During Operations:

1. This operation will be a placer mine, obtaining precious metals through sand and gravel washing and classification.
2. Water from the Colorado River will be pumped into a holding pond, then into the placer washing system.
3. Sands and gravels will be picked up with a backhoe, washed, flocculated with a biodegradable detergent, then classified and concentrated. Final chemical processing will be done off the minesite.
4. After concentration, sand and silt will be pumped into a tailings pond. Clarified water will be routed back into the holding pond for re-use. There will be no discharge of the mining process water into the Colorado River.
5. A maximum of 10 acres will be disturbed per year.

After Operations:

1. As the active mining front progresses to the southwest, silt and sand deposited as tailings material will be preliminarily regraded. This will be a continuous process.
2. The landowners will take responsibility for establishing final grade and replanting the area. The entire disturbed area will be reclaimed to agricultural crops, with the aid of the Soil Conservation Service (SCS). SCS will determine fertilization and irrigation needs.
3. Final reclamation of all disturbed acreage will take place each fall.
4. There will be no permanent fixtures on-site. All equipment will be removed after the entire area has been mined and reclaimed.



4695

T. 23 S. ; R. 24 E. S. L. B. & M.

4400

APPROXIMATE START OF
MINING OPERATIONS

Spring

Cato
Ranch

COLORADO RIVER

1" = 1320'

4780

DOLORES RIVER

4200

4200

4500

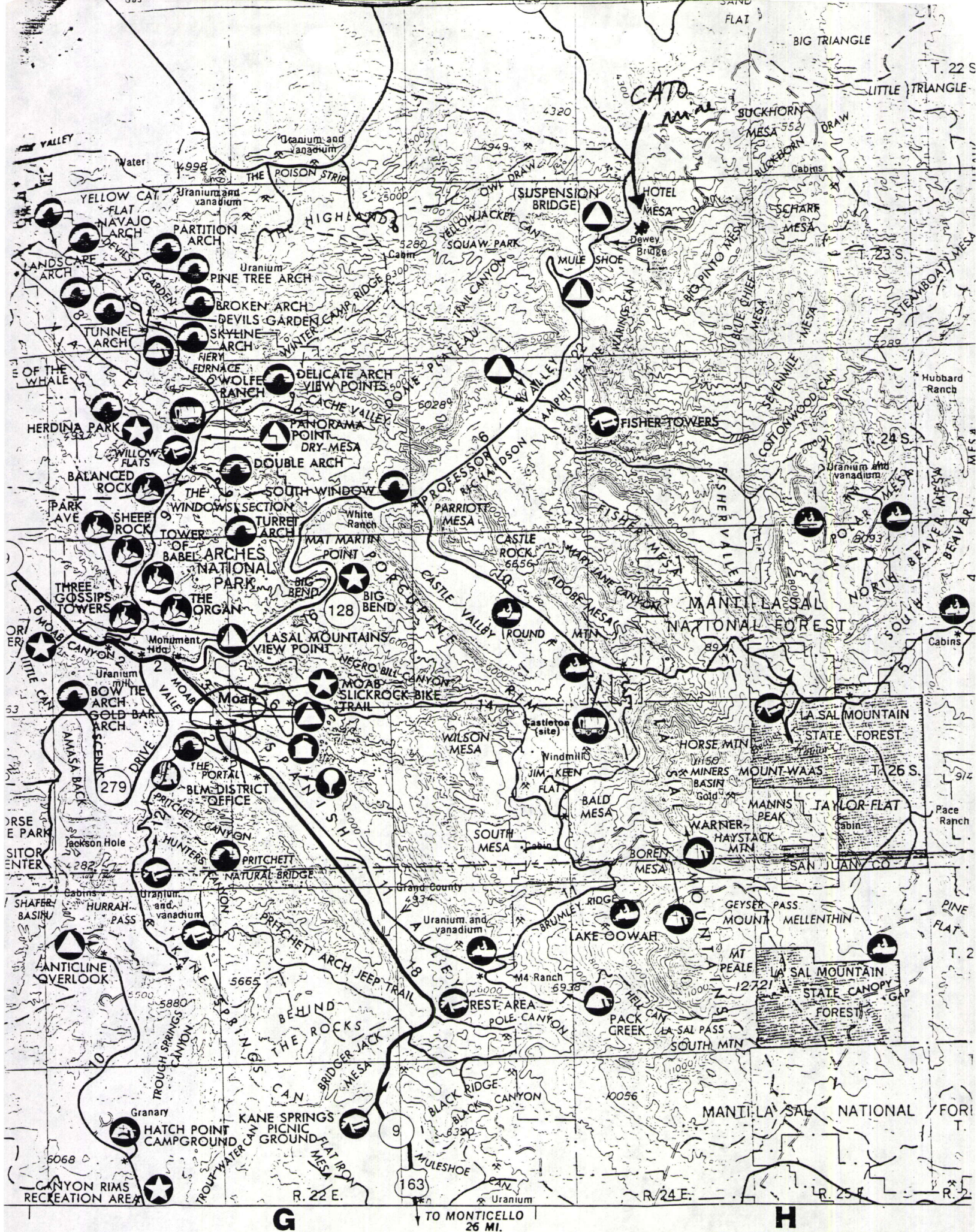
Gravel Pit

Gaging
Station

APPROXIMATE PROPOSED LOCATION OF
PERSONNEL LIVING QUARTERS &
SANITARY DRAIN FIELD

4400

Sep



DIVISION OF OIL, GAS, AND MINING
BOND ESTIMATE

OPERATOR: Crater Exploration, Inc.
MINE NAME: Cato Placer
LOCATION: Sec. 8, T. 23 S., R. 24 E., SLB&M
COUNTY: Grand
DATE: May 19, 1983
Based on 10 acres maximum annual reclamation

	Operation	Amount	Rate	Cost
A.	CLEAN-UP			
	1. Removal of structures & equipment.	\$500.00	Lump Sum	\$ 500.00
	2. Removal of trash & debris.	\$300.00	Lump Sum	300.00
	3. Leveling of ancillary facilities pads and access roads.	\$500.00	Lump Sum	500.00
B.	REGRADING & RECONTOURING			
	1. Earthwork including haulage and grading of spoils, waste and overburden.	\$450.00/ac	10 ac	4,500.00
	2. Recontouring of highwalls and excavations.	n/a		
	3. Spreading of soil or surficial materials.	n/a		
C.	STABILIZATION			
	1. Soil preparation, scarification, fertilization, etc.	\$200.00/ac	10 ac	2,000.00
	2. Seeding or planting.			
	3. Construction of terraces, waterbars, etc.	n/a		
D.	LABOR			
	1. Supervision.			
	2. Labor exclusive of bulldozer time.	\$50/ac	10 ac	500.00
E.	SAFETY			
	1. Erection of fences, portal coverings, etc.	n/a		
	2. Removal or neutralization of explosive or hazardous materials.	n/a		
F.	MONITORING			
	1. Continuing or periodic monitoring, sampling & testing deemed necessary.	\$500.00	year	500.00
			TOTAL	\$8,800.00
			10% contingency	
G.	OTHER			
		1984-\$10,648		
		1985-\$11,713		
		1986-\$12,884		
	Includes total costs per acre as per SCS letter.			880.00
				\$9,680.00 (1983 dollars)